DOCUMENT RESUME

ED 150 778 EC 103 885

TITLE	Gifted and Talented.
INSTITUTION	South Carolina State Dept. of Education, Columbia. Office of General Education.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Jun 77
NOTE	96p.; Document may not reproduce well due to light color of type
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	Administrator Role; Community Role; *Educational Alternatives; Elementary Secondary Education; *Gifted; *Individual Characteristics; Parent Role; *Program Development; *Talent Identification; *Teacher Education; Teacher Role

ABSTRACT

The booklet presents a number of alternative educational approaches for gifted and talented students. Five chapters cover the following topics: characteristics of the gifted; identification; program development information and resources for enrichment, grouping, acceleration, and guidance programs; teacher selection and training; and communication with the school, parent, and the community. A bibliography with 25 entries is also provided. (SBH)

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gifted and talented

Produced by
Education Products Center
in Cooperation with
The Office of General Education

South Carolina Department of Education
Cyril B. Busbee, State Superintendent

Columbia, South Carolina
June 1977

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PURPOSE

CATALYST is an on-going series of state-of-the-art reports addressing statewide educational issues. Each CATALYST describes alternative programs or approaches both in- and out-of-state, which treat a particular issue. CATALYST provides the reader an opportunity to examine issues of statewide interest through a number of perspectives: current research findings, comparative experiences of local school district programs, and experience and philosophy of college and university personnel, as well as of state and national consultants.

The first edition of CATALYST addressed the issue of "needs assessment." This second edition on "the gifted and talented" is to be followed by a third edition on "trends in staff development." Projections are for the publication of at least two to three editions of CATALYST per year.

This edition of CATALYST is intended to present to the reader a number of alternative approaches which provide for the gifted and talented students in our schools. Potential uses of the publication include: planning a new program for gifted students, modifying an existing program, implementing new classroom approaches for the gifted, and surveying the current literature in the area. Whatever use is made of the publication, its intended purpose is to expand the reader's perspectives on the current issue of educating gifted and talented students.

Elmer L. Knight

Dr. Elmer L. Knight, Director
Education Products Center

ACKNOWLEDGMENT

The chief investigator for this publication was James H. Turner, from the Office of General Education in the South Carolina Department of Education. In addition to his responsibilities as state coordinator for the gifted and talented, Jim Turner served as director of a ten-state project on gifted and talented from July 1974 to September 1976. This project included North Carolina, South Carolina, Georgia, Florida, Mississippi, Alabama, Louisiana, Kentucky, South Dakota, and Wyoming, and was funded under Title V, Section 505 of the Special Projects Act through the U.S. Office of Education. Turner is therefore recognized nationally, as well as in the state and region, for his expertise in the area of programs for the gifted.

Mr. Turner selected and screened the literature to be reviewed in the document and, in cooperation with the Education Products Center, provided the text for the publication.

INTRODUCTION

The education of gifted children and youth is a universal problem affected by competing educational priorities. No one interested in the development of human potential would deny the right of all children to appropriate educational opportunities. Yet, because the gifted are often adept at adjusting to usual expectations and many achieve without developing their true capabilities, attention to their needs is often postponed. The mistaken assumption that "gifted children can make it on their own" becomes a readily accessible excuse.[1]

Motivational factors affecting the development of programs for the gifted have shifted over the years. In the late 1950's, the scientific and military challenge of Sputnik stimulated the United States to improve educational opportunities for the more advanced student. Today our interest in these young people is more soundly based, prompted by the struggle to develop more appropriate educational opportunities for all children.

The United States Office of Education is now significantly committed to the education of the gifted, affirming its position in the 1972 *Report to Congress on the Education of the Gifted and Talented.* The *Report to Congress* revealed that gifted children were not being identified in the schools; that the federal, state and local governments were doing little to provide programs for them.[2]

Gifted children in our schools today are often locked in by structural and administrative restrictions which stifle their development. The greater degree of flexibility which American education has achieved within the recent past still falls far short of meeting the needs of gifted children. The *Report to Congress* and other recent studies, however, have provided the impetus for effective action leading to the development of gifted potential. Leadership training activities have been undertaken at national, state and local levels, some federal funding has been realized, and many states, including SOUTH CAROLINA, have taken a step forward in providing for the needs of the gifted.

Although recent accomplishments and commitments have been significant, James J. Gallagher, author of *Teaching the Gifted Child,* reminds us that

> the 21st century approaches at a terrifying rate and we had better have 21st century ideas to meet our problem. . .to provide quality services to those children who will exert a key influence on making the 21st century the best, the worst or the last on our shrinking planet.[3]

WHO ARE THE GIFTED?

A population identified as gifted may be characterized as one of many abilities, interests and talents with complex diversity far beyond the ordinary. Definitions may vary from community to community, depending on such philosophical considerations as:[4]

1. Which gifts are most needed or most highly rewarded in the American culture at a given time?

2. Which talents have enhanced the material, intellectual, social, spiritual and aesthetic quality of human life through the ages?

3. Which talents can schools comfortably foster, according to regular educational priorities?

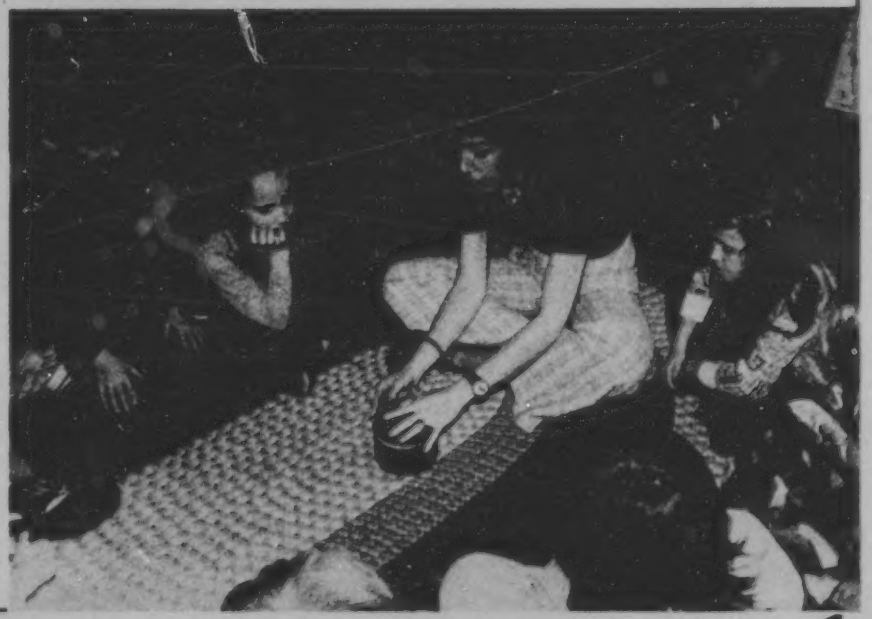
In the early 1900's, giftedness was usually associated with intellectual or academic achievement, with primary emphasis on the intelligence test as a selection device.[5] The wide dispersion of talents and abilities in any selected group of children, or even in any one child, is ample evidence of the need to adopt a much broader definition of giftedness. The expanded definition must give consideration to individuals who demonstrate outstanding ability in one domain but not in others, as well as those whose general ability pervades many fields.

The following definition, developed by an advisory panel to the U.S. Office of Education, suggests the inclusion of not only intellectually superior students, but also those who demonstrate high potential or achievement in other fields.[6]

Gifted and talented children and youth are those identified by professionals and other qualified individuals as having outstanding abilities and who are capable of high performance. These are children and youth whose abilities, talents, and potential require qualitatively differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Children and youth capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual or performing arts
6. psychomotor ability



This definition should not be interpreted to mean that ALL children and youth are gifted or talented in one area or another. In fact, the proportion of the school-age population estimated to be gifted or talented even considering the broader definition is three to five percent.[7]

The specific areas included in the broader definition may be further defined as follows:[8]

(1) **general intellectual ability** refers to those students who have high academic achievement or potential in several fields of study

(2) **specific academic aptitude** refers to those students who have high academic achievement or potential in a specific field of study

(3) **creative or productive thinking** refers to those students who have advanced insight, outstanding imagination, intense interest in one or more fields of achievement, innovative or creative reasoning ability, ability in problem solving, and high attainment in original or creative thinking

(4) **leadership ability** refers to those students who have been observed to be "natural" leaders, those who are looked upon by their peers as being leaders, those who have demonstrated leadership through specific school activities, and those who have demonstrated leadership in nonacademic activities

(5) **visual or performing arts** refers to those students who have demonstrated or indicated through affective as well as cognitive performance outstanding ability in areas such as art, music, drama, speech, and language

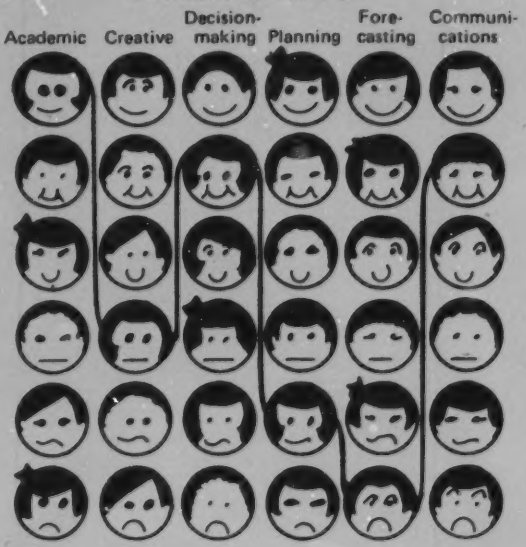
(6) **psychomotor ability** refers to those students who have demonstrated high ability or attainment in either gross or fine motor coordination manifesting itself in areas such as sculpturing, mechanics, surgical medicine, athletics, etc.

characteristics of the gifted

Characteristics which communities recognize as indicators of giftedness are as diverse as the communities and students themselves. The gifted student who is attractive, athletic, witty, and a natural leader and who shows a broad range of interests will be in sharp contrast to the equally gifted student who is very serious, quietly absorbed in his own world of research and study. Both of these gifted children will differ from a third talented individual who excels in art, music, or creative expression or evidences deep sensitivity toward others.

Gifted children and youth are as different among themselves as other children are. Some demonstrate overall achievement or potential in many areas of endeavor; others may show superiority in specific areas only. The multifaceted nature of giftedness is illustrated below.[9]

TAYLOR'S TOTEM POLES



MULTIPLE TALENT TOTEM POLES

Although the point has been emphasized that gifted students are unique as individuals, there are some general observations that would hold true

in characterizing the gifted as a group. Gifted individuals seem to have "a need to know" and value learning for its own sake. They are usually keen observers who "see" more than others. Their interests are rarely limited, and they have the capacity to use knowledge and information other than to memorize, store or recall.[10]

Gifted students are found in all walks of life, regardless of social or economic status. The definition of giftedness, however, may vary depending on local value systems.[11] This fact, that giftedness takes on different connotations, results in serious implications for student identification. (See Chapter II.)

If an observer realizes that a list of characteristics for gifted children is not all-inclusive, then it is helpful to study such a list in order to develop more insight into the identification process. May Seagoe of the University of California at Los Angeles has combined gifted characteristics with possible problems associated with each.[12]

Characteristics	Concomitant Problems
1. Keen power of observation; naive receptivity; sense of the significant; willingness to examine the unusual	1. Possible gullibility
2. Power of abstraction, conceptualization, synthesis, interest in inductive learning and problem solving; pleasure in intellectual activity	2. Occasional resistance to direction; rejection or remission of detail
3. Interest in cause-effect relations, ability to see relationships; interest in applying concepts; love of truth	3. Difficulty in accepting the illogical
4. Liking for structure and order; liking for consistency, as in value systems, number systems, clocks, calendars	4. Invention of own systems, sometimes conflicting
5. Retentiveness	5. Dislike for routine and drill; need for early mastery of foundation skills
6. Verbal proficiency; large vocabulary; facility in expression; interest in reading; breadth of information in advanced areas	6. Need for specialized reading vocabulary early; parent resistance to reading; escape into verbalism
7. Questioning attitude, intellectual curiosity, inquisitive mind; intrinsic motivation	7. Lack of early home or school stimulation
8. Power of critical thinking; skepticism, evaluative testing; self-criticism and self-checking	8. Critical attitude toward others; discouragement from self-criticism

Characteristics (cont'd)	Concomitant Problems (cont'd)
9. Creativeness and inventiveness; liking for new ways of doing things; interest in creating, brainstorming, freewheeling	9. Rejection of the known; need to invent for oneself
10. Power of concentration; intense attention that excludes all else; long attention span	10. Resistance to interruption
11. Persistent, goal-directed behavior	11. Stubborness
12. Sensitivity, intuitiveness, empathy for others; need for emotional support and a sympathetic attitude	12. Need for success and recognition; sensitivity to criticism; vulnerability to peer group rejection
13. High energy, alertness, eagerness; periods of intense voluntary effort preceding invention	13. Frustration with inactivity and absence of progress
14. Independence in work and study; preference for individualized work; self-reliance; need for freedom of movement and action	14. Parent and peer group pressures and nonconformity; problems of rejection and rebellion
15. Versatility and virtuosity; diversity of interests and abilities; many hobbies; proficiency in art forms such as music and drawing	15. Lack of homogeneity in group work; need for flexibility and individualization; need for help in exploring and developing interests; need to build basic competencies in major interests
16. Friendliness and outgoingness	16. Need for peer group relations in many types of groups; problems in developing social leadership

Ruth Martinson points out that:

> Gifted children are able to go beyond the usual performance of their peers to unusually high levels of abstraction and generalization. They sense the significance of problems and solve problems of which others may not even be aware. They deal with concepts and ideas and produce creatively at greatly advanced levels and should be encouraged to do so.[13]

As a point of comparison, the following description of the gifted includes items more closely related to creative development.[14]

(Cranston, Rhode Island,
Title III, ESEA Program
Julius Briet, Director)

Displays a great curiosity about objects, situations, or events. Has the capacity to look into things and be puzzled; gets involved with many exploratory type activities; is interested in a wide range of things.

Is a self-initiated student, usually needing little help in knowing what to do; starts on his own; pursues individual interests and seeks own direction.

Exhibits originality in oral and written expression. Consistently gives unusual, clever, unique responses or ideas away from the cliché or stereotype.

Has unusual talent to express himself in the arts (i.e., music, dance, drama, drawing, play activities, and/or artistic expression).

Has the ability to generate many alternatives. Seeks many directions and is flexible in thinking by going at right angles to the main stream of thought in the classroom.

Is perceptually open to his environment. Uses all of his senses to be aware of things around him; keenly observant and alert to things that are done as well as things that are not done.

Displays a willingness for complexity. Thrives on problem situations; selects a more difficult response, solution, or problem over the easier; seeks complex asymmetrical forms compared to symmetrical forms; has a preference for "digging into" things.

Has the capacity to use knowledge and information other than to memorize, store, and recall. Seeks new associations among items of information; combines elements of materials or knowledge in a unique fashion.

Shows superior judgment in evaluating things. Reasons things out; seeks logical answers; can see implications and consequences; makes decisions easily.

Is a good elaborator. Produces a variety of detailed steps; continually adds on to ideas, responses, or solutions; loves to embellish materials and ideas.

Is a good guesser. Is able to hypothesize; is full of wonder about things; is a risk taker; makes good educated guesses.

Learns rapidly, easily, and efficiently.

Has the ability to see relationships among unrelated facts, information, or concepts.

Uses a lot of common sense; seeks the most practical approach.

Retains and uses information which has been heard or read.

Uses a large number of words easily and accurately.

Asks many questions of a provocative nature; inquisitive about knowing why instead of what; has the capacity to inquire.

In order to meet the complex and unique challenge of the gifted, it is important that attention be focused on their truly outstanding abilities and exceptional needs. Martinson offers a note of caution, however, in that

> the temptation to include large segments of the population should be resisted because it results in diminished attention to those who need special provisions most. The gifted child, in other words, can be served poorly in a curriculum designed for the average of the upper 20%. For this reason and others, the gifted are defined as a group so advanced that they require special attention beyond the usual school provisions.[15]

6

IDENTIFYING THE GIFTED

The identification of gifted and talented students involves two major facets: (1) who should be identified as gifted, and (2) how may they best be identified.

As the definition of giftedness is expanded to include the creative, psycho-social and kinesthetic areas, the problems of converting philosophy into program implementation arise. School systems must decide which areas of giftedness to foster, how the children and youth will be screened and selected, and, of critical importance, what programs will be available for them.

Once a school system has determined the area(s) of giftedness it intends to foster, through its own needs assessment or in collaboration with other agencies in the local community, the next step is to plan a program of assessment to find children and youth who demonstrate outstanding performance or potential. It would be worthwhile to explore some of the elements of an effective identification procedure.

continuous assessment

It is important to realize that even with the most reliable assessment instruments, student performance varies over time. Miriam Goldberg points out that even relatively stable IQ scores show decreasing correlations over a period of time. Some of these fluctuations reflect increased or decreased opportunities to develop abilities; others represent shifts of interest or motivation as children encounter new experiences.[16]

An effective program of identification must be continuous with provisions for reassessment over periods of time.

comprehensive assessment

Identification ideally includes all of the information which can be gathered about a given pupil. Obviously, such a comprehensive approach cannot be accomplished, nor will it be effective, if screening and identification are based on any one criterion. The IQ score, as documented by Goldberg

> was used to supplement and later even to replace assessments of scholastic achievement as a criterion for determining giftedness. One's score on an IQ test soon took on the power of an immutable determinant of intellectual ability, and, consequently, of potential academic success during the school years and professional success in later life.[17]

One obvious criticism of the extensive use of IQ tests as selection devices is their failure to measure adequately performance or potential in areas other than the academic or intellectual domain. For example, effective divergent thinking (often associated with the creative) requires fluency of ideas, flexibility in shifting categories, originality of thought and freedom to elaborate on a given idea. These abilities are, at best, inadequately assessed by standard intelligence tests.[18]

The IQ test is also generally ineffective in identifying gifted students in the classic talent areas – poetry, art, music, drama and dance. Outstanding abilities in these areas, like divergent thinking, are often overlooked with the IQ test because the young artist, poet or musician may, or may not, demonstrate high verbal ability.[19]

Social or interpersonal competence (leadership) nor kinesthetic abilities are adequately measured by the IQ test.[20] The point remains that some young people will "qualify" as gifted on an IQ test; others, who may

be just as gifted, but in areas other than academic, may not. Therefore, the argument for a **multiple** approach to identification is a sound one and such an approach is essential if any measure of accuracy is expected in the identification process.

nomination by others

Opportunities to nominate potentially gifted students should be given to all those who are in a position to know of a student's high capabilities: teachers, principals, other school resource personnel, parents, and even classmates.

Although such nominations may be less objective than specific test criteria, Goldberg warns that

> to eliminate artistic, musical, dramatic, social or interpersonal talents. . .because they cannot be assessed objectively is to. . .deprive individuals of opportunities to develop these talents, and society of their contributions.[21]

Research and experience has demonstrated, at least in reference to **teacher nominations**, that some teachers may have mistaken impressions of the gifted child. For example, teachers may view the child as well-mannered, studious and cooperative when such a description represents only one set of possible characteristics. It would enhance the effectiveness of teacher nominations if such nominations were preceded by specific in-service training designed to acquaint teachers (and others) with the characteristics, nature and needs of the gifted child.[22]

Peer nominations are possible through comments students make about the abilities of others. Martinson points out, however, that "many children conceal their abilities very effectively as they conform to classroom expectations." Peer nominations are more accurate, therefore, in a learning environment with open opportunities for the gifted to produce nearer their capabilities.[23]

School personnel may also find clues to giftedness by listening to what **parents** have to say about their children. Parents can provide information on advanced abilities and knowledge or interests which are not always apparent to the school or teacher. One should consider, however, that many parents may exaggerate or misinterpret their child's abilities. "Parents with limited verbal facility or who, because of work, personal problems, or other factors communicate very little with their children, are less likely to have formed judgments than those who are in constant communication with their child."[24]

pupil products

When activities are encouraged at school and at home, many indicators of giftedness may emerge in the **products** of students. These products may be the result of particular interests developed through independent study apart from the regular school program. Community involvement by students may serve as a source for developing special abilities as well, and should be investigated in a comprehensive screening procedure.

Additional information may be obtained from a student's grades in school, positions of leadership attained, achievement level, reading and mathematics levels.[25]

judgments of creativity

The early discovery and nurture of those students who show promise of making outstanding creative contributions should be of continuing concern to anyone interested in giftedness. Obviously, not every creatively gifted child will reach the heights of an Edison, Salk, Steinbeck or others noted for their creative endeavors. Yet, in all parts of the country, vast numbers of these students have gone unidentified and unrecognized. Who is to say how much of a contribution those children would have made if their creative abilities had been more fully developed.

Martinson reports that attempts to develop creativity tests, mainly based on the work of J. P. Guilford, have proceeded at a growing rate into the 1970's. However, determining reliability has been a complex problem. Creativity tests, nevertheless, have helped to revive an interest in improved conditions for learning and, undoubtedly, have had some influence on encouraging experimentation.[26]

Because of the specific nature of many creative talents, more reliance has been placed on the judgments of experts in various fields of creative endeavor. Barron points out that the

> evaluation of creativity should be made by people who can distinguish eccentricity from originality and who understand the qualities of complexity and originality inherent in the creative act. Among school children, these qualities must be discerned at various age levels; therefore, an understanding of child development, as well, is important.[27]

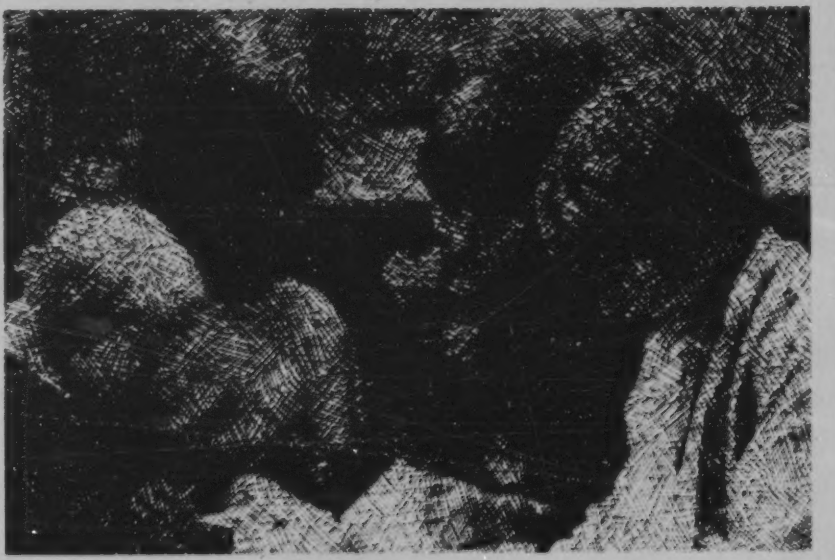
The use of experts to judge creative accomplishment has several advantages, among them the use of trained and educated judgment. The focus in screening and identifying the creatively gifted child must be placed on accuracy rather than on convenience.

culturally different populations

Identification procedures in locations which include poor, isolated and/or culturally different children should be adapted to screen and select the gifted and talented more effectively.

The importance of identifying giftedness among culturally different or disadvantaged populations is apparent in the numbers whose abilities would go unrecognized or wasted. Any identification effort which concentrates on a single ethnic population, however, becomes partial and selective. Attention should be given to **all** disadvantaged or culturally different gifted children with economic or environmental limitations.[28]

Many times the failure to provide for gifted among disadvantaged populations is due to errors in judgment. Often, such children and youth have lacked the environmental opportunities to acquire verbal skills necessary to perform well on tests requiring such ability. They may come from backgrounds which place little value on verbal behavior and provide few books or magazines for the development of vocabulary and information.[29] This, in itself, suggests the ineffectiveness of IQ tests, which are highly verbal, in identifying gifted and talented among culturally different or disadvantaged populations. It also suggests the use of additional measures, such as teacher, peer and parent nominations, pupil products, and other indicators of a child's performance in relation to a specific environment that is disadvantaged.[30] The chart or matrix on page 10 offers a comparison of appropriate procedures for identifying the culturally different student and the more advantaged, or mainstreamed, gifted student.[31]



X – THE MAINSTREAMED GIFTED STUDENT

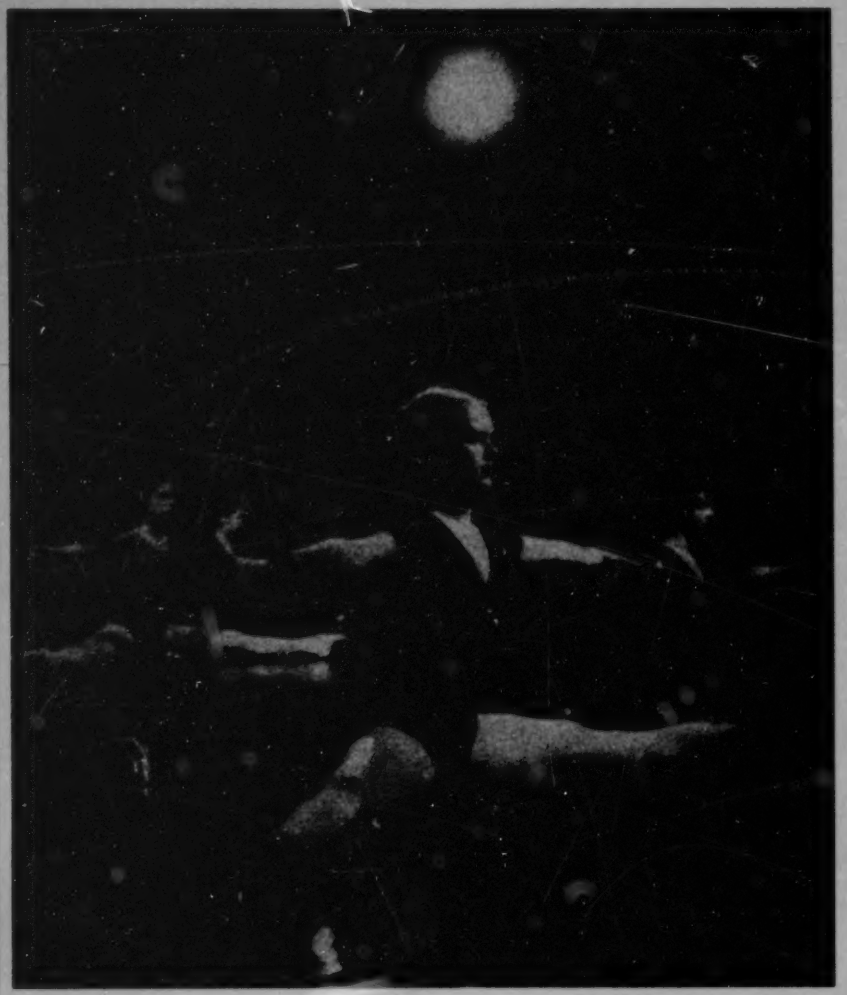
O – CULTURALLY DIFFERENT GIFTED STUDENT

	TEST DATA								PERFORMANCE DATA						Developmental Data
											Nominations Checklists Scales				
	Intelligence	Achievement	Creativity-Divergent Thinking	Aptitude	Divergent Feeling	Biographical Inventory	Culture Free	Grades	Demonstration of Skills	Teacher and/or Other School Personnel	Peer	Parent	Self	Case studies, anecdotes, biographical data and interviews
Academic/ intellectual	X	X	O	X O		X	O	X	X O		X O	X O	X O	X O
Artistic/ expressive			X O	O	X	X O			X O	X O	X O	X O	X O	X O
Leadership/ psychosocial				X		X O			X O	X O	X O		X O	X O
Divergent production/ process			X O	O	X				X O	X O	X O	X O	X O	X O
Kinesthetic				X					X O	X O	X O	X O	X O	X O

Among the special talents or strengths which disadvantaged gifted students often possess, the following are suggested by Torrance:[32]

1. Ability to express feelings and emotions
2. Ability to improvise with commonplace materials
3. Articulation in role playing and story telling
4. Enjoyment of and ability in art, drawing, painting, etc.
5. Enjoyment of and ability in creative movement, drama, and dance
6. Enjoyment of and ability in music, rhythm, etc.
7. Expressiveness in speech
8. Fluency and flexibility in non-verbal media
9. Originality of ideas in problem solving and brainstorming
10. Emotional responsiveness
11. Problem-centeredness

Passow points out the "gifted and talented among disadvantaged and minority groups pose a particular challenge and opportunity for educators. To begin to meet this challenge, educators must examine their own expectations regarding this untapped talent pool."[33] While all disadvantaged children need help, disadvantaged gifted children have more talent to reward society if it nurtures them, and more to oppose society if it neglects them.



summary of identification

A successful and effective screening and identification program should include:

1. early identification
2. continuous assessment
3. comprehensive assessment using multiple criteria
4. provisions for culturally different populations

Identification does serve to identify a population of children and youth who possess advanced ability. It does serve to alert teachers to the true potential of individuals and helps them plan more effectively for the gifted. It also encourages parents, who may not have been aware, to help develop their child's abilities.

Identification, in and of itself, does not improve learning. Children who are identified as gifted but provided no significantly different curricular experience will probably demonstrate little change. Identification cannot reduce the "impact of malnutrition, restricted learning opportunities, poor parent-child relationships. . .and other negative factors. But if a well-planned program reduces these or other deficits, performance and achievement of a gifted child will considerably improve."[34]

12

PROGRAMS FOR GIFTED

A comprehensive approach to identification must be followed by effective program implementation. Dr. Alexander Taffel, principal of the Bronx High School of Science in New York City, observes that

> . . .unless his (a gifted child's) talent is recognized and provided for by a truly challenging program, that talent will simply deteriorate. Many bright students set adrift in a general school population that operates on an academic level lower than their capabilities just merge and become indistinguishable from their less able classmates as the years go on.[35]

Schools should not only identify the gifted and talented but also provide a setting where those with the highest abilities can develop without undue restraint. They need freedom to learn and achieve freely in all areas. Opportunities must be open to write, compose, build, invent, analyze ideas, debate issues, produce creatively and examine environmental and social problems. Because of their high ability, the gifted thrive in an environment where excellence is expected of them – where critical thinking, problem-solving and creative expression are encouraged.

initiating a program

The development and implementation of a program for the gifted depends on assessing and integrating the EXISTENT with the IDEAL. A program will, of course, be limited by existing resources, but the formation of a program must be compatible with the expectations held for the gifted and talented.[36]

Sandra Kaplan suggests that a program can become operational only after consideration of the following organizational, personal, and environmental questions.[37]

WHY is a program necessary?

The literal interpretation of the statement, "an education commensurate with each child's ability to learn," reinforces the reason for differentiated programs for the gifted and talented. Identification of the differences and specialties among students mandates provisions which develop these characteristics. The gifted and talented are students whose learning styles and thinking dimensions demand experiences beyond the educational mainstream.

WHAT does a program provide?

The ability of the school and home to articulate and accept the logic and objectives for a program determine the readiness and subsequent time to begin the program. Identification of preparatory steps and implementation procedures, as well as the assignment of a coordinating leader, indicate the course of action as well as the time needed to implement the tasks.

WHEN and WHERE will provisions for the program be made available?

A program provides multidimensional and appropriate learning experiences and environments which incorporate the academic, psychological, and social needs of these students. Administrative procedures and instructional strategies should encourage intellectual growth, thinking, and self-understanding. Each student has alternatives which teach, challenge, and expand his knowledge to question, apply, and generate information.

HOW will the provisions be put into operation?

Operation of the program is, in many cases, dependent upon allocation of money. It is totally dependent on trained personnel and appropriate facilities and materials. The program can be put into operation only

when students and educators know the answers to the questions you are now reading.

WHO will be responsible for implementing these provisions?

Personnel responsible for the program must be adept at working with the behavioral and mental attributes of the gifted. They are staff members who can provide flexibly and humanely for the uniqueness of this group of students as well as for the diversity among its members.

Kaplan points out that

> The weaving of personal and societal values with principles and theories of learning and psychology into a rationale which substantiates the purpose for a program becomes its philosophy. The selection of staff, the development of curriculum, and the arrangement for experiences are dictated by the philosophy of the program.[38]

The result is a philosophy of the program which sets definite guidelines and benchmarks to:

1. develop curriculum
2. arrange activities and experiences
3. select staff
4. select students
5. determine human and physical resources available to students and teachers

The following philosophy statement, extracted from the *Florida State Resource Manual for Gifted Child Education*, provides some guiding thoughts:[39]

> A gifted child is unusually endowed with outstanding intellectual and creative talents. These attributes may be nurtured and stimulated or stifled and repressed depending on the atmosphere in which the youngster at an early age perceives his world. Self-actualization occurs when learning is relevant, self-motivated, and valued by accepting teachers, peers and family.
>
> Educators bear the responsibility of knowing the total gifted child and need to understand personal needs and anxieties as well as achievement competencies in order to facilitate growth. We need to create a warmly responsive, non-threatening climate in the classroom. We need to help others who are charged with educating these gifted children to understand and utilize teaching strategies involving higher thought processes. It becomes our responsibility to prepare these future leaders for a rapidly changing world where facts become outdated before printed; where learning how to learn, how to adapt and change, and relying on process rather than static knowledge are highly significant factors in determining educational goals for the gifted and talented.

program development

Gifted pupils have varied interests and abilities. Consequently, individualization should be stressed. Subject matter, skills, learning materials and strategies need to be selected with a specific gifted population in mind.

Goals for the program should also be based on the philosophy regarding education of the gifted. Such goals may vary somewhat from school system to school system, but the following should serve as a framework:

1. to provide a learning atmosphere which will enable the gifted child to develop his potential and exceptional abilities particularly in the areas of decision making, planning, performing, reasoning, creating and communicating;

2. to provide an opportunity for the student to utilize his initiative, self-direction and originality in dealing with problems;

3. to provide the environment for setting realistic goals in which the student accepts responsibility through the selection of appropriate projects and programs to develop and expand both cognitive and affective abilities;

4. to provide activities which incorporate a multi-media, multi-level, interdisciplinary approach and foster transfer of learning;

5. to provide each student with experiences which broaden horizons, expand goals, and encourage responsibility and intellectual freedom.

No **one** program that any school could devise could meet the needs of all gifted children. Diversity, if anything, is a constant characteristic of the gifted. However, schools can initiate meaningful changes that will enhance program development for the gifted. James J. Gallagher, in *Teaching the Gifted Child,* suggests these major types of changes a school can, and should make:[40]

1. The **content** of the material presented to the students can be changed. Since the gifted child has demonstrated manifest ability to handle a complexity of ideas far beyond his chronological age, it is natural to assume that schools sensitive to this problem will make a genuine effort to modify the content reaching these students to stress the greater complexity and higher levels of abstraction that they can comprehend.

2. The **method of presentation** of material to the students can be changed. Since the process of thinking or the style in which a youngster approaches difficult problems appears important, a significant amount of attention has been given not only to what the teacher presents but how she tries to present it. The goals of the teacher of gifted students should go beyond the mere absorption of knowledge to help the child develop a learning style that will serve him or her in good stead in later studies and in later life.

3. The third major avenue of change would be to modify the nature of the **learning environment** itself. This means either moving the youngster to a different setting or changing the nature of the setting in which he receives his instruction. Such devices as acceleration to the next highest grade level, or the use of open classrooms, resource rooms, after-school clubs, or special classes – all represent decisions to change the nature of the learning environment.

Several learning theory models have been the basis for changing both content and method of presenting material to better meet the needs of gifted students. Three of these models include: Bloom's *Taxonomy of the Cognitive Domain,* J. P. Guilford's "Structure of the Intellect," and Frank Williams' "Thinking – Feeling Behavior in the Classroom." These models have been adapted to the philosophy that gifted students are capable of such higher level thought processes as: analysis, synthesis, and evaluation, as well as fluent, flexible, original, elaborative, imaginative and complex thinking. Details concerning these models can be studied in the following sources:

1. *Taxonomy of Educational Objectives: Handbook I, Cognitive Domain,* edited by Benjamin Bloom. New York: David McKay Company, 1956.

2. Meeker, Mary. *The Structure of Intellect: Its Interpretation and Uses.* Columbus, Ohio: Merrill, 1969.

3. Williams, Frank. *Classroom Ideas for Encouraging Thinking and Feeling.* Buffalo, N. Y.: Dissemination of Knowledge, Publishers, 1970.

Program Prototypes

Program prototypes are organizational patterns which become the environmental setting for learning.

Deciding which prototypes to use or adapt represents only the beginning of program development. The shaping of a program is also influenced by:

1. available resources in the community, both human and physical;
2. the local educational point of view;
3. number and type of gifted children identified.

Basic components for developing any program are enrichment, grouping, acceleration and guidance, according to Kaplan.[41]

Administrative arrangements such as grouping, special interest classes or grade-skipping, are devices only. They do not, in themselves, constitute a program. However, they may be utilized to facilitate individualized instruction for gifted pupils.[42]

ENRICHMENT

Experiences which replace, supplement, or extend learnings as the basis for each type of prototype. Enrichment is the reason for the development or adoption of any prototype.

GROUPING

Provisions which facilitate the student's access to learning opportunities

- Cluster grouping within the regular class
- Special regular classes
- Part-time groups before, during, after school or Saturdays
- Seminars
- Mini-courses
- Team teaching
- Alternative schools
- Resource room or demonstration classroom
- Intinerant or resource teacher
- Field trips and cultural events
- Special summer sessions

ACCELERATION

Activities which promote learning beyond regularly prescribed curriculum

- Early entrance or pre-school classes
- Double grade promotion
- Advanced placement classes
- Ungraded classes
- Multi-age classes
- Tutoring
- Correspondence courses
- Extra classes for extra credit
- Credit by examination
- Independent study
- Continuous progress curriculum
- Year-round school
- Flexible scheduling
- Block or back-to-back classes

GUIDANCE

Experiences which promote understanding of self and others and explore opportunities for careers

- Individual conferences
- Group meetings
- Career and vocational counseling
- Educational counseling
- Community programs and sponsorship
- Scholarship societies
- Study groups
- Special education classes
- Tutoring

"Variations between prototypes are a result of how these components are put together and how they are made available to students."[43] The following descriptive summaries show a variety of potential approaches to developing prototypes.

Enrichment refers to the attainment of wider and deeper meanings concerning a topic of study. For the gifted, the range of enrichment possibilities is infinite and should be the goal toward which individualized programming may be directed. An enriched curriculum or enriched learning experience for gifted involves an emphasis on generation of knowledge, including analysis of relationships between facts and concepts.[44]

Special Grouping Possibilities

Special Classes. Full-time classrooms, composed of highly gifted youngsters, whose needs cannot be met in the regular classroom, are one option. These classes may be grouped in one facility or in feeder schools, or in individual schools where numbers are sufficient. Cross grading of 4,5,6; 4-5,5-6; 1,2,3; or 3-4,1-2; or other combinations may be utilized.

Cluster Grouping. Groups of eight to fifteen gifted youngsters may be placed in a class setting. Special activities are planned for the gifted.

Homogenous Grouping. A district or several small neighboring districts may structure schools in terms of ability grouping. Average children receive a balanced educational offering; slower children receive remedial and specialized instruction; gifted children receive exposure to strategies and materials that will be challenging to them.

Enrichment in the Classroom (or Acceleration?)

Independent Study. Individualized projects or studies planned in various subject matter areas provide advanced study and research methods for both horizontal and vertical enrichment.

Supplemental Learning Kits. Individualized materials such as science, reading or math labs, kits or other commercial instructional items may be made available to pursue individual study.

Accelerated Subject Matter Units. These units lend themselves well to the higher thought processes such as analysis, synthesis, and evaluation. Units in subject matter areas may be as widely different as statistics units in mathematics to characterization units in language arts.

Team Teaching. Teachers with specific talents or knowledge may arrange their daily schedules to exchange groups of students for instructional purposes. These cooperative arrangements may cut across grade levels as well as schools.

Diagnostic-prescriptive learning, disregarding age or years in school, avoids lessons or courses in which the child is already sufficiently accomplished.

Flexible scheduling provides private research or projects in the library, science lab, math lab or elsewhere in the school; independent study and pursuit of special interests outside the school.

Small Group Instruction. Seminars for gifted students may be arranged to meet daily or weekly to discuss specific topics or materials. These seminars can be handled by volunteer resource people, teachers, consultants, or in some cases, other students.

Lecture/Demonstrations. Community resource people, teachers with expertise or consultants may provide large group experiences. These may involve the acquisition of skills (such as art techniques), experiences geared to the discussion of ideas (such as simulated United Nation meetings), or knowledge building (such as presentations by specialists).

Placement in Special Setting (through use of guidance techniques)

Seminars. Small group seminars at local colleges or universities.

Individual or Small Group Counseling. Opportunities for counseling may be arranged for gifted students involving personal, educational or vocational guidance. Individuals trained in group dynamics and techniques can encourage gifted students to discuss and analyze areas of concern such as sibling rivalry, dating, communicating with parents, etc.

Special summer sessions co-sponsored or offered by the school district, regional multi-district educational group, or nearby college or university. These are generally conducted for stimulation, without grades or strict attendance requirements. They provide for in-depth study of student-selected topics as well as the flexibility to explore new areas of interest.

Career exploration workshops or internships for secondary students.

One-day sessions providing in-depth exploration of a single subject or topic.

Special interest mini-courses or clubs meeting regularly after school, in free periods or on Saturdays, with optional attendance and no grades.

Group discussions with adults on politics, social issues, foreign cultures, music, architecture, etc.

Mentors-Tutors. A qualified parent, student, community volunteer or teacher may volunteer to meet on a regular basis with a student who has a particular interest or need that cannot be met in the regular confines of the classroom (e.g., a computer technologist working with a junior high student interested in computer programming or a budding fourth grade poet working with a professional poet).

Travel. Summer travel and weekend travel with guides may be arranged as experiences to extend studies, particularly in social science areas. An example would be the opportunities to travel to actual digs with anthropologists and archaeologists.[45]

examining alternative programs in operation

After considering program philosophy, purpose, objectives, content, learning environment and activities, the next step is studying alternative programs and approaches.

In shaping a program for gifted and talented students, a school district can expand its ideas and benefit from viewing varied approaches by examining a number of programs already in operation: the theories on which they are based, organizational patterns, types of giftedness served, and evaluation findings.

The following summaries spotlight the outstanding features and strengths of five differing programs for gifted and talented students across the nation:

Itinerant Teacher Program: McComb, Mississippi[46]

During the 1973-74 school year, an experimental program was implemented to give students who had special talents, and others who did not meet the academic criteria, some release time from the regular classroom to emphasize the development of creative thinking and communication skills. Test data and teacher observation have indicated growth by the students in creativity and independent learning patterns.

There are three schools and a total of thirty-eight students served by the project. One itinerant teacher works with grades 1-3. (Three resource teachers serve grades 4-8 and one art teacher serves all grades, 1-8.)

Multi-criteria screening devices are used in identification of gifted and talented students:

Teacher Recommendation
Group Tests
Identification of Special Talents
Individual Intelligence Tests

Teaching methods encourage development of higher thinking skills, creativity and independent study patterns. Pupils are involved in a variety of experiences in flexible and diverse situations. Students are given an element of choice, with the alternative built on individual interest. Forms of study include drama, creative writing, visual arts, independent study, group dynamic exercises, mini-courses, field trips, and wide use of resource persons. Activities are varied, including: fossil hunting, dissection of frogs, study of mythology, improvisation for the theater, folk music, academic games, and value clarification.

FOR FURTHER INFORMATION, WRITE:

Ms. Joan A. Brumfield
McComb Municipal Separate School District
Post Office Box 868
McComb, Mississippi 39648

An In-Class Alternative for the Gifted/Talented: Torrington, Wyoming[47]

Project Challenge is an elementary school project housed at Lincoln Elementary School, Torrington, Wyoming. Funded by Title III, ESEA, its focus is on providing in-class activities for the gifted and talented students, without pulling them out of class on a regular basis and without isolating them from their peers.

One school and approximately eighty-five gifted and talented students are served by the project.

Fourteen teachers devote part of their time to the gifted program and part to the regular school program. Their responsibilities include: identification, programming, and instruction. Two aides are assigned to the project.

The four major means of identification include: teacher recommendation, IQ tests, achievement tests, and peer nominations.

Lincoln is a completely individualized school. Teachers work in teams, sometimes giving large group instruction, sometimes giving small group instruction, sometimes having the student work on his own.

Integrating a gifted and talented program into such an existing program was not a very difficult thing to do. Not only have students been identified in each of the academic areas but also in the arts (music and

visual art) and psychomotor areas.

Each student periodically receives a CRISP (Case Related Interest Study Packet) that delves in depth into some area of particular interest or one of his academic strength. These CRISP packets are teacher-designed, short-term packets which challenge the students' thinking and problem-solving abilities by forcing them to evaluate, synthesize, judge, and generally broaden their mental skills. They are generally isolated activities focusing on the center approach, which has been a way of life for Lincoln School for years. The Torrington project makes wide and varied use of community mentors and resource persons.

FOR FURTHER INFORMATION, WRITE OR CALL:

Mr. Ed Jolovich, Principal
Lincoln Elementary School
Torrington, Wyoming 82240
(307) 532-2643

The Unique Learning Experiences Program: Sioux Falls, South Dakota[48]

Through the Unique Learning Experiences Program, an attempt has been made to provide individualized learning experiences for about one hundred talented and gifted senior high school students each year.

The overall objective is to assist the gifted and talented student develop a proposal in his particular area of talent, then permit him to implement it within a minimum of constraints and a maximum of creativity and flexibility.

The program addresses four major needs of the gifted and talented student: recognition by peers and adults of his special talent, involvement in satisfying activities frequently not provided in the regular school program, acceptance and communication from an adult with expertise in his area of talent, experience in his area of talent to foster his desire to make fulfilling contributions to society.

Project students are identified in many talent areas, not strictly academic areas. Extensive use has been made of community resources and talent. Roughly one hundred talented community persons have served as consultants and advisors to student projects. Activities often take place outside the school building at the site or location where needs can be fulfilled most effectively. School day time constraints are not imposed on such activities.

FOR FURTHER INFORMATION, CONTACT:

Program Coordinator
Unique Learning Experiences
Sioux Falls Independent School Districts
Sioux Falls, South Dakota 57102

Saturday Enrichment Classes[49]

Oftentimes, staff and resources for producing teaching materials to turn on the gifted student are not available in the regular school setting during the 8:00 a.m. – 4:00 p.m. time space. When this is the case, many school districts turn to the Saturday enrichment classes or to after school hours enrichment.

The purpose of such classes is to provide students an opportunity to explore in greater depth and concentration the areas in which they are interested and talented. The classes are based on the theory that intelligence is multi-faceted and that horizons can be broadened through creativity.

Teachers for enrichment classes are best recruited from the regular staff of teachers because there is greater possibility of carry over of exciting activities from the enrichment program to the regular class.

Some enrichment programs are established as part of a university training program, and in those cases, the teachers often receive course credit as well as providing for the children.

The Saturday enrichment classes usually run from 9:00 – 12:00 noon, with the children taking three courses. The class offerings should be planned in such a way that each grouping would include an active class like fencing, an academic one like geology, and a creative one like puppetry making and production.

The classes' costs range from $2.50 per class to $25.00 per session. This covers a nominal materials fee.

An exemplary program is in operation at the University of South Florida and includes a range of classes offered to children.

FOR FURTHER INFORMATION, WRITE:

Program for the Gifted
University of South Florida
Tampa, Florida

Florida School of the Arts for High School and Junior College Students: Palatka, Florida[50]

The Florida School of the Arts was organized by the Florida State Board of Education in 1974 to provide talented students of this state, who are occupationally oriented to the arts, a means of achieving both an academic education and artistic training appropriate to their gifts through public education.

The kind of student sought for the School of the Arts is the young man or woman of talent and strong motivation with a career inclination towards the arts, whether it be in a performing or supporting role.

Admission is based on recommendation, audition and interview. Before a student can apply for audition, he/she must possess an acceptable academic high school grade point average or a high school diploma, and submit two letters of recommendation from any previous fine arts instructor.

Students enrolled at FloArts will be continually reviewed for continuation as students throughout their residence at the school.

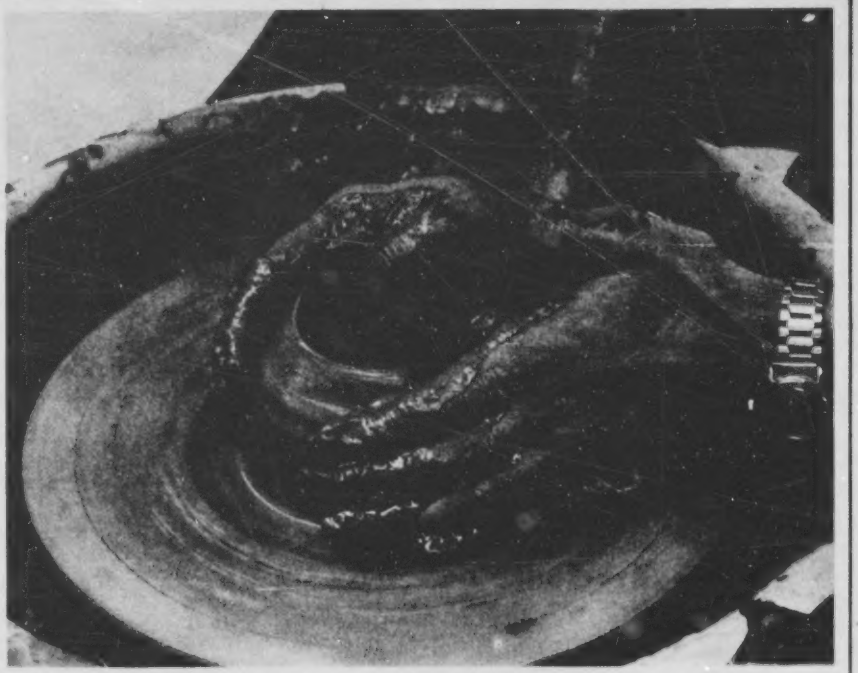
The high school program requires the completion of all state secondary education requirements and a college entrance program while enrolled in the special high school arts program.

The Florida School of the Arts has five arts program areas: art, dance, music, production/design, and theatre. Programs in each of these disciplines are structured to embrace the training, not only of performers, but of all students inclined toward the arts, whether their particular interests be performance, supportive or managerial.

The numerous advantages for attending the Florida School of the Arts include: the career goal programs with concentration in the arts and a minimum of general education, a concentrated two-year arts program, professional training and visitation with renowned artists, personal attention and artistic development, opportunities for numerous performances and exhibitions, professional affiliations, specialized arts tours, career placement service, as well as involvement in an interrelated creative arts community with students and instructors with common interests and concerns. In short, FloArts is a state-supported professional arts school offering a quality program at minimum costs.

At present, a search is being conducted throughout the United States for the specialized arts faculty that will be needed to carry out this unique program. Professional artists are being sought who have the special capability of relating to and training young, sensitive artists.

A Professional Artists Project is being prepared which will utilize local, state, and national professional artists. These professionals, not considered as full-time faculty, will work with FloArts under a Visiting Artist Program, Artist-in-Residence Program, Exchange Artist Program, and an Artist Apprenticeship Program. This project will offer FloArts students opportunities to study and work with renowned professional artists in each interest area, and will also provide the students greater insight into the rigors of the artistic profession.



Offerings of the five program areas include:

Art – advertising design, painting/drawing, printmaking, ceramics/sculpture.
The art program is designed to offer young artists personal guidance and development for a specific career in the art field. Through intensive training, independent study, and apprenticeship with professional artists, the student will actualize his/her talent in the area of his/her strength.

Dance – ballet, modern jazz.
Training program for young dancers who seek a future in professional modern and ballet dance companies, television and musical theatre dance companies, television and musical theatre dance troupes and as independent dance artists. The program includes ballet and modern dance technique, improvisation, music, acting, technical dance theatre and design. Training is continuously provided in the performance of dance repertoire and creative new works.

Music – voice, piano.
The vocal program offers the student necessary training in singing, acting, and dance to enter the areas of musical theatre, opera, television, movies or entertainment. The piano training program is designed to develop the young musician in the direction he or she wishes to proceed for a professional career as a concert performer, professional accompanist and coach, or entertainer.

Production/Design – technical theatre.
This program enables students interested in the technical and design aspects of theatre to train for available positions. Training includes drawing and design techniques, materials and methods, drafting, stagecraft, set and lighting design and set construction. As an interprogram area, the student will experience the use of technical theatre for opera, musical theatre, dance theatre, television and theatre.

Theatre – acting.
An intensive program in acting is offered for the preparation of the young actor to enter the theatre, television or movie industry. Training includes acting techniques and methods, voice, singing, dance, technical theatre history, and performance. Admittance into the program offers the opportunity to be a member of the FloArts Theatre Ensemble Company, which guarantees numerous and valuable performance experiences.

FOR FURTHER INFORMATION, WRITE:

The Florida School of the Arts
St. Johns River Junior College
Palatka, Florida

South Carolina initiated three pilot programs for gifted and talented in Kershaw County School District, Richland School District 2, and Spartanburg School District 7 in 1974. Though these programs have many similarities, there are differences which make them each unique. The following summaries describe selected components of each program.

Kershaw County School District: Downtown Learning Center (Mentor Component)[51]

There is a definite need in a program for gifted students for a course which can aid these exceptional students in making career choices. Often, making a career decision is difficult and confusing for a gifted student, for he has the potential for success in several areas. This career exploration program developed for the SEAGUL program has four major goals to help the student gain a better understanding of himself and his abilities: to present an overall view of career possibilities; to give the student time to experience work situations through mentors (resource persons); and to allow the student to evaluate his experiences and relate them to others.

The Downtown Learning Center is basically an independent study course, although the students begin the exploration process as a group. Approximately eight weeks of this year-long course are spent in group dynamics activities, activities which will aid the student in better understanding others as well as himself, in getting more out of his experiences as well as putting more into them. Also during this period, the student carefully examines his interest areas and learns how to explore the community for stimulating career experiences.

Following this training session, the student forms a contract with the teacher and with a mentor to work in an independent career project with the aid and guidance of a mentor. Even though the student is working independently from the entire DLC group, he will meet with the rest of the group and with the resource teacher one day per week to discuss the progress in his project and to participate in additional group dynamics activities to help him better understand his role in society. Students spend a minimum of five hours each week working in the DLC.

A major requirement is that each student share what he has learned in a creative fashion such as guided tours, demonstrations, slide-tape presentations, films, and special performances and displays. Students are evaluated by their mentors and by themselves according to the project objectives which they design in their contracts.

FOR FURTHER INFORMATION ON THIS OR OTHER COMPONENTS OF THE KERSHAW COUNTY SEAGUL (SPECIAL EDUCATIONAL ACTIVITIES GEARED TO UNIQUE LEARNING) PROGRAM, WRITE OR CALL:

Mrs. Nancy Tucker, Coordinator
Program for the Gifted
Kershaw County Schools
Dubose Court
Camden, South Carolina 29020

Richland School District 2 (ALERT Program): Elementary Component – A Resource Approach[52]

A resource center in a central location serves students in grades 4-7 from six elementary and two middle schools. This center provides for both academic and creative activities. Areas of focus in the elementary resource program are:

1. **Critical Thinking**
   These activities produce conceptual understanding, raise pertinent questions, require curiosity, take note of defects or needed changes, seek improvements to customs, behavior, institutions, evaluate implications, observe imperfections or inadequacies, promote constructive discontent, encourage flexibility, strengthen purposeful judgment, and evaluate personal and group performance. The student is encouraged to discover for himself the purpose and validity of any activity he engages in, adapting this for his own performance and that of his peers.

2. **Research**
   These activities develop research skills to make gifted students aware of the tools by which they may pursue their interests. Specific actitivities include: experimental research, discovery learning, formal research into printed material and reporting on this research in a variety of ways, survey and interview techniques, and exploration into a variety of areas not covered by the regular school curriculum.

3. **Interpersonal Relationships**
   A distinct advantage of a program for gifted students is that it brings together a group of gifted peers. The interaction within such a group provides reassurance and sparks new dimensions in curiosity and learning. The gifted may become isolated from their peers; therefore, structured interaction with a clearly understood purpose in a climate of trust frees the gifted student to be completely himself and develop in a balanced way.

4. **Creative Communication**
   These activities are designed to develop creative skills including: brainstorming, problem solving, fantasy, transformation of one idea to another application, understanding and use of techniques of divergent and convergent thinking. Creative expression demands skills in the use of various types of media, understanding and use of music and art with emphasis on self-expression, various types of creative writing, body movements and improvisational drama.

FOR FURTHER INFORMATION ON THIS AND OTHER ASPECTS OF THE RICHLAND 2 PROGRAM WRITE OR CALL:

Mr. Sidney Hopkins
Administrative Assistant
Richland District 2
6831 Brookfield Road
Columbia, South Carolina 29206

Spartanburg District 7: Elementary Art Component[53]

A total of sixty students participate in the elementary art component. Each class meets for one and one-half hours after school.

The students are divided into three groups of twenty students each. Ten first graders and ten second graders meet on Monday afternoons. Twelve third graders and eight fourth graders meet on Tuesday afternoons. Ten fifth graders and ten sixth graders meet on Thursday afternoons.

The instruction provided and the production work of the students are limited to two-dimensional work in media designed to improve the drawing ability of participating students.

In addition, the participants work with materials such as acrylics and colored inks which are prohibited in the regular program because of the cost factor.

Criteria for selecting gifted art students included:

1. imagination
2. use of detail in drawing
3. skill in drawing the proportions of a person

First graders were given the Draw-a-Man Test (Harris) and participants from grades 2-6 were asked to draw what they would look like thirty years hence. This test was devised by the art coordinator for the district.

Students must also have been recommended by the art specialist assigned to the elementary schools before they could participate in this program.

FOR FURTHER INFORMATION, CONTACT:

Dr. John Tillotson
Programs for Gifted
Spartanburg District 7
Dupre Drive
Spartanburg, South Carolina 29304

South Carolina Department of Education: Interstate Involvement

On July 1, 1974, the South Carolina Department of Education was awarded a two-year, Title V, Section 505 grant to direct a ten-state consortion in developing interstate cooperation and communication in the area of gifted education. The Title V project involved the cooperative efforts of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, South Dakota and Wyoming.

In addition to conducting leadership development activities in each state, the project also called for the production of handbooks and other audiovisual materials concerning (1) student identification, (2) program development, and (3) teacher/staff in-service training. The following handbooks were developed and are available, upon request, from the State Departments of Education in each project state.

1. *Gifted and Talented: An Identification Model* (Developed by Kentucky and Mississippi, with North Carolina as lead component state)
2. *Alternative Programming for the Gifted and Talented* (Developed by Mississippi, South Dakota and Wyoming, with Florida as lead component state)
3. *Guidelines for In-service Education: Gifted and Talented* (Developed by Alabama and South Carolina, with Georgia as lead component state)

The following audiovisual materials were developed through contractual agreements in relation to the three project components, and are available on loan from the State Department of Education in each project state.

1. "Mediated Simulation on the Identification of Gifted and Talented Youth" (slide-tape simulation developed by Dr. John Rader, Indiana Department of Education).

2. "Teaching Gifted Children" (materials booklet and accompanying video tape developed by Dr. Dorothy Sisk, University of South Florida and now Director, Education for the Gifted and Talented, U.S. Office of Education).

3. "Heuristics of Problem Formulation," "Universal Field Trip Bubble," "Dramatic Encounters in Non-Verbal Communication," and "Dramatic Encounters in Verbal Communication" (video tapes and accompanying written material developed by Dr. Leonard J. Lucito and Dr. Joseph Walker, Georgia State University).

TEACHER SELECTION AND TRAINING

As discussed in Chapter III, there are at least three ways in which a school program can be modified to meet the special needs of the gifted changes (1) in content, (2) in learning style, and (3) in the learning environment. Changes in content and learning style reflect the need for different teacher preparation. Gallagher quotes Ruth Martinson, who summarizes the necessity of special teacher preparation as it relates to programs for the gifted:

> Successful programs show that special preparation of teachers is mandatory. Teachers who have such preparation tend to be sympathetic to the gifted and talented, and to provide them with necessary learning opportunities. This preparation should be extended to the total educational profession and to the public at large so that the gifted and talented may be widely encouraged to use their abilities. The result would be greater numbers of gifted political leaders, inventors, creative artists, educators, medical personnel, and others contributing to society and working on its problems. The result would be a better future for all Americans.[54]

Superior teachers are essential to the success of almost any educational program, but obviously they are integral to the success of programs for gifted. A more critical concern, perhaps, is **which** teachers should be selected to work with the gifted – what are their characteristics and training needs?

Gallagher addresses this concern in *Teaching the Gifted Child,* by pointing out that long lists of desirable characteristics of teachers of the gifted can have a rather paralyzing effect" in that few teachers can realistically meet such ideal qualifications.[55] For example, it would practically be impossible to find teachers who demonstrate all-encompassing abilities such as

1. superior teaching proficiency
2. creativity
3. versatility of interests and accomplishments
4. maturity and emotional stability
5. good health, abundant energy and stamina
6. genuine interest in and understanding of the gifted
7. enthusiasm and high ability for motivation
8. excellent sense of humor and common sense
9. honesty and willingness to admit limitations
10. confidence in themselves and their pupils' abilities
11. flexibility
12. sensitivity

Nevertheless, outstanding teachers must be identified who can work successfully with the gifted. Perhaps a more practical, yet still somewhat ideal, list of teacher characteristics can be found in the *Florida Resource Manual for Gifted Child Education*:[56]

CREATIVITY IN:

thinking
classroom management
teaching strategies
utilizing materials
planning educational experiences
use of community resources

ORGANIZATIONAL SKILLS IN:

curriculum
utilizing physical environment
locating and working with community resource people
classroom management

ENTHUSIASM FOR:

the learning process
the development of a gifted program
the individualization of learning
creativity in teaching and learning

WARMTH AND SINCERITY:

in accepting and encouraging individual differences and non-conformity of gifted children
for fellow professionals and colleagues
in working with parent relationships

KNOWLEDGE IN:

the area of gifted children, their needs and characteristics
one field or area of expertise
the problem solving methods utilized to relate various fields
broad areas or disciplines
teaching strategies specifically geared to the gifted

FLEXIBILITY IN:

utilizing the physical environment
utilizing a variety of materials and equipment
structuring and restructuring interest and learning groups
modifying lessons to capitalize on opportunities for spontaneous learning

RESOURCEFULNESS IN:

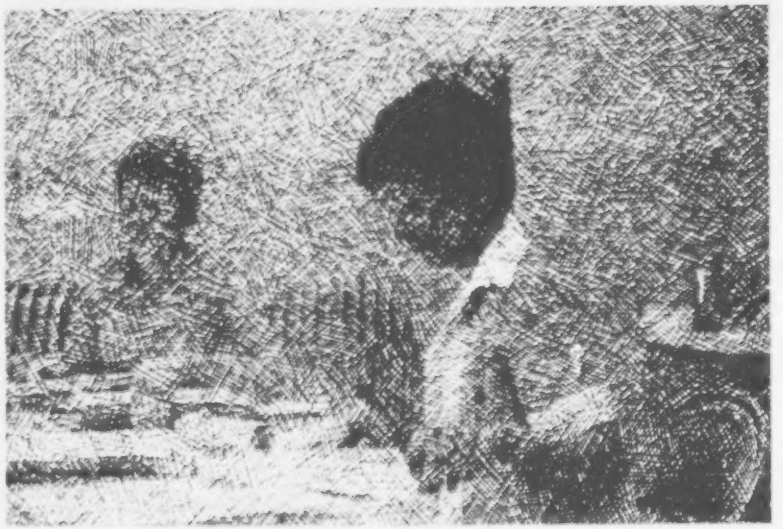
locating supplementary materials
identifying resource individuals
locating sites for meaningful educational experiences

Even when teachers of the gifted are carefully selected and represent the highest levels of professional competence, their teaching performance can be significantly improved through in-service study. Highly desirable changes in the quality of learning, communication, classroom content and diversity of classroom experiences can result. Other benefits that may be derived from in-service opportunities include expansion of teaching skills, knowledge of subject matter and increased appreciation and understanding of the needs of the gifted.

The Report to Congress on the Education of the Gifted and Talented points out that some teachers with a lack of specialized training have been found disinterested and even hostile toward the gifted. Many of these teachers believe the gifted will reveal themselves without special programs.[57]

Specialized training for teachers of the gifted is encouraged in most states. Some states, however, require college training in the area of the gifted in order to meet specific state certification requirements. Only twenty states currently have Masters or Ph.D. programs in gifted education. (See chart on pages 32 and 33.)[58]

Whatever the means of training, whether through college-level degree programs or local in-service opportunities, teachers must be prepared to work with gifted children. Opportunities for experience with programs and in-service preparation produce necessary changes in teacher attitudes and skills.



MASTERS AND PH.D. PROGRAMS IN GIFTED EDUCATION OR WITH EMPHASIS IN GIFTED EDUCATION

ALABAMA

Masters Program:
University of Alabama at
Birmingham, AL 35294
Dr. Gayle Gear
Room 207, Bldg. 1
Department of Special Education
(205) 934-3440

University of South Alabama
Mobile, AL 36688
Dr. Marvin Gold
Department of Special Education
(205) 460-6460

Ph.D. Program:
University of Alabama at
Tuscaloosa, AL 35486
Dr. Carol Schlicter
Department of Special Education
Box 2592
(205) 348-7340

CALIFORNIA

Masters Program:
California State University at
Los Angeles, CA 90032
Dr. Barbara Clark
Department of Special Education
(213) 244-3525

California State University at
Northridge, CA 91324
Dr. Joyce Hagen
Department of Special Education
(213) 885-2596

California State University at
Long Beach, CA 90801
Dr. Alfred Lazar
Special Education Area
Dept. of Educational Psychology
(213) 498-4526

San Francisco State University
San Francisco, CA 94132
Department of Special Education

COLORADO

Total External Ph.D. Program:
(all field work):
University of Northern Colorado
Greeley, CO 80631
Dr. Don Luketich
(303) 351-2427

CONNECTICUT

Masters and Ph.D. Program:
University of Connecticut
Storrs, CT 06268
Dr. Joseph Renzulli
Department of Special Education
(202) 486-4032

Masters Program:
Southern Connecticut State College
New Haven, CT 06515
Dr. Rossalie Pinkham
Department of Special Education
(203) 397-2101

FLORIDA

Masters and Ph.D. Program with State Certification:
University of South Florida
Tampa, FL 33620
Dr. Dorothy Sisk
Department of Special Education
(813) 974-2100

GEORGIA

Masters and Ph.D. Programs:
Georgia State University
Atlanta, GA 30303
Dr. Leonard Lucito
Dr. Joseph Walker
(404) 658-2312

University of Georgia
Athens, GA 30601
Dr. Kay Bruch
Dept. of Educational Psychology
(404) 542-4110

Summer Programs Leading to Certification:
Georgia College
Milledgeville, GA 31061

Valdosta State College
Valdosta, GA 31601

Course Work Leading to Certification:
Augusta College
Augusta, GA 30904

Georgia Southern College
Statesboro, GA 30458

West Georgia College
Carrolton, GA 30117

KANSAS

Masters Programs with State Certification:
Kansas State University
Manhattan, KS 66502
Dr. Myrliss Hershey
Holton Hall
(915) 532-5540

University of Kansas at
Lawrence, KS 66044
Dr. Donald J. Treffinger
(913) 864-4526

INDIANA

Masters and Ph.D. Program:
Purdue University
West Lafayette, IN 47906
Dr. John Feldhusen
Department of Education
(317) 749-2844

LOUISIANA

Masters and Ph.D. Program:
Northeast Louisiana University
Monroe, LA 71201
Dr. Oliver Hensley
(318) 342-4051

MARYLAND

Masters Program:
Johns Hopkins Evening College
Baltimore, MD 21218
Dr. Lynn H. Fox
Intellectually Gifted Child Study
(301) 366-3300, ext. 1502

MISSISSIPPI

Masters, Specialists, and Ph.D. Program with State Certification:
University of Southern Mississippi
Hattiesburg, MS 39401
Dr. Winston Markwalder
Dr. Frances Karnes
(601) 266-4179

MONTANA

Masters Program:
Eastern Montana College
Billings, MT 59101
Dr. C. Rockney Copple
Institute for Habilitating Services
(406) 657-2351

NEW YORK

Masters and Ph.D. Program:
Teachers College
Columbia University
New York, NY 10027
Dr. Abraham Tannenbaum
Department of Special Education
(212) 678-3865

OHIO

Masters and Ph.D. Programs:
Kent State University
Kent, OH 44242
Dr. Wilbur Simmons
401 White Hall
(216) 672-2477

MASTERS AND PH.D. PROGRAMS IN GIFTED EDUCATION OR WITH EMPHASIS IN GIFTED EDUCATION (Cont'd.)

PENNSYLVANIA

Masters Program:
University of Pennsylvania
University Park, PA
Dr. Joseph French
(814) 865-4700

Shippensburg State College
Shippensburg, PA 17257
Dr. James Payne
(717) 532-9121

TENNESSEE

Masters Program (not Tennessee state approved*)
University of Chatanooga
Chatanooga, TN 37404
Dr. Gene Wiggins
Hunter Hall
(615) 775-4368

**Northern Georgia residents may attend and fulfill Georgia certification requirements.*

UTAH

Masters Program Proposed (not yet state approved)
University of Utah
Salt Lake City, UT 84102
Dr. Calvin Taylor
Psychology Department
(801) 581-6879

VIRGINIA

Masters and Ph.D. Programs:
University of Virginia
Charlottesville, VA 22903
Dr. Virgil Ward
School of Education
(804) 924-7471

WEST VIRGINIA

Masters Program:
Marshall University
Huntington, WV 25701
Dr. George Schena
(304) 696-3170

WYOMING

Masters Program:
University of Wyoming
Laramie, WY 82071
Dr. Jim Hook
Educational Foundation
218 Graduate Hall
(307) 766-6325

No Higher-Degree Programs in Gifted Education Are Offered in the Following States (and District):

Alaska
Arizona
Arkansas
Delaware
District of Columbia
Hawaii
Idaho
Illinois
Iowa
Kentucky
Maine
Massachusetts
Michigan
Minnesota
Missouri
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
North Carolina
North Dakota
Oklahoma
Oregon
Rhode Island
South Carolina
South Dakota
Texas
Vermont
Washington
Wisconsin

In states that do not have specific certification requirements for teachers of the gifted (including South Carolina), it is highly advisable that in-service training be initiated. This training should be multi-faceted and may include the following:

1. Specialized college courses

2. Teaching strategy workshops which give opportunities to investigate various qualitatively differentiated teaching strategies, different approaches, and different experiences for students.

3. Theory, psychology, and research workshops which will provide an opportunity to expand knowledge about gifted/talented programs and the underlying psychological and research bases for the programs.

4. Material workshops which provide an opportunity for teachers to investigate varying kinds of materials and equipment that might be particularly suited to gifted/talented students.

5. Local, state, regional, and national conferences and visitations which provide increased understanding of the program as well as providing (1) an opportunity to find out about other practices and programs throughout the country, and (2) time to interact with those individuals directly involved in gifted/talented education.

6. Opportunities to visit other in-state or out-of-state programs for gifted/talented should be provided.

Additional information may be obtained by reading *Guidelines for In-service Education: Gifted and Talented*, 1976, a handbook developed through a Title V project administered through the South Carolina Department of Education.

COMMUNICATING WITH THE SCHOOL, PARENT, AND COMMUNITY

Communication is a vital element in any successful school program; however, it becomes even more important when a special program, with a selected group of students, is being developed.

Four specific groups with whom open, two-way channels of communication must be maintained if a program for gifted is to be successful are: parents, administrators, regular classroom teachers and the community at-large.

parents

Before parents can be meaningfully involved with the gifted student and his teacher in the learning process, they must be informed of their role in providing a responsive home environment for fostering giftedness. Parents should be provided with concrete information as to the child's strengths and weaknesses with specific suggestions for reinforcement at home. PARENTS MUST BE MADE AWARE OF THEIR IMPORTANCE IN THE EDUCATIONAL PROCESS OF THE GIFTED.[59]

Parents often need continuing help in understanding and providing for their gifted children. Accordingly, teachers need to encourage parents to talk about the home behavior of their children, and in turn share the performance of the gifted child at school with the parents. This close cooperation of the home and the school will become an important factor in helping gifted children to use and develop their abilities. Some of the ways in which parents can supplement and extend the school program are to:[60]

1. Share an interest in reading with the child – read and discuss with them the books they are reading; be sure they have a library card and many opportunities to use it.

2. Encourage originality – help the child make his own toys, projects, or models from wood, clay, or other materials which may be available.

3. Encourage questions – help the child to find books or other sources which can provide answers rather than attempting to answer all of the questions.

4. Stimulate creative thinking and problem solving – encourage the child to try out solutions without fear of making mistakes. Help him to value his own thinking, learn from mistakes, and encourage him to try again.

5. Foster good work habits – help the child to plan his work and then be sure he completes his plan. This applies to daily tasks at home and in the community as well as school work.

6. Find time for the family to talk together about many different things – help the child work toward expressing himself better.

7. Take trips together to places of interest – to museums, exhibits, fairs, government and community agencies.

8. Encourage a variety of experiences – help the child to become interested in many activities and develop hobbies.

9. Allow for some free time – encourage the child to wonder,

to engage in reflective thought, and to appreciate the world around him.

10. Be a real companion to the child – explore and share each other's thinking. Enjoy the child and help him to remember his childhood with pleasure.

(It is recommended that the reader obtain copies of the following publications which provide a more detailed approach in working with parents, as well as suggestions for parents in providing opportunities for the gifted.)

1. Delp, Jeanne L. and Martinson, Ruth A. *The Gifted and Talented: A Handbook for Parents.* National Leadership Training Institute for Gifted and Talented, Ventura, 1975.

2. Coffey, Ginsberg, Lockhart, McCartney, Nathan and Wood. *Parentspeak on Gifted and Talented Children.* National Leadership Training Institute on Gifted and Talented, Ventura, 1976.

administrators

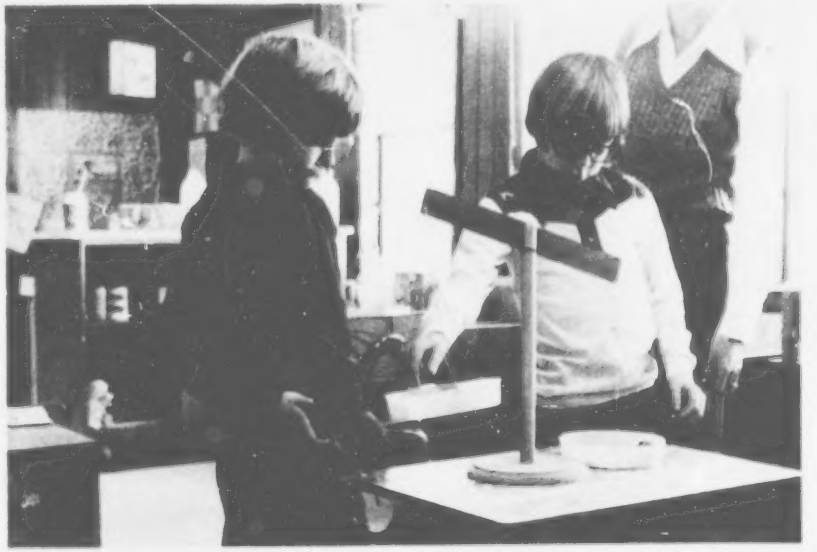
The development of a program for gifted children should be established upon the foundation of policies adopted by the local board of education, in accordance with any existing state regulations, and appropriate for conditions in that school district.

An on-going, successful program is more nearly assured if the planning includes all administrative personnel from the superintendent to each school principal.[61]

Principals must be involved in decisions regarding curricular change. Regardless of the worth of an idea or an innovative change, it will probably be implemented only if the administrator is supportive and convinced that it will improve the school's program. Norman Hall, a member of the executive committee of the American Association of School Administrators, reinforces the need for an active role by the administrator in planning programs for the gifted.

> A program. . .must have a facilitator and someone in a leadership position to see it through the inevitable rough spots.[62]

In order to provide adequate leadership, the administrator must be well informed about gifted children in his own school and others. It is highly advisable that the administrator participate with staff members in in-service training geared to the nature and needs of the gifted. The kind of leadership exercised by the administrator will directly affect the planning, development and implementation of a program for the gifted.



regular classroom teachers

A popular approach to programming for gifted children, particularly at the elementary level, provides for a limited portion of the student's time to be spent in a resource room or enrichment center with a specially trained teacher or teachers. In this case, the majority of the student's educational time is still spent with regular classroom teachers, making it necessary for these teachers to be in close communication with the teachers of the gifted.

Regular classroom teachers, like the administrator, can be effective in helping to plan and develop a program for gifted. Therefore, it is critical that the regular classroom teacher recognize the nature and needs of the gifted so as not to develop misunderstandings that could jeopardize the success of the program. Regular classroom teachers need to realize that the program is designed to supplement their efforts, not to supplant them.

Some suggested ways of establishing communication and a close working relationship with regular classroom teachers are the following:[63]

1. **Meetings**

   a. Teachers of the gifted may be invited to explain their programs to total school faculties.

   b. Teachers of the gifted may plan meetings for small groups of teachers with whom they share educational responsibilities.

   c. Teachers of the gifted may arrange telephone conferences.

   d. Teachers of the gifted may arrange individual conferences with regular classroom teachers.

2. **Written Communication**

   a. Newsletters may be sent to classroom teachers, to inform them of activities, projects, etc.

   b. Teachers of the gifted may share written evaluation of a child's progress with the regular classroom teacher.

   c. Teachers of the gifted may solicit exemplary ideas or activities from regular classroom teachers for inclusion in the gifted program.

3. **Visitation**

   a. Classroom teachers may be encouraged to visit the program for gifted.

   b. Classroom teachers may accompany teachers of the gifted on visits to other programs or conferences.

"The gifted child represents a threat to some teachers. When this threat is coupled with having the child taken out of his regular setting and spending some time with a specially trained teacher, the threat is compounded and requires careful and tactful handling. The problem of interpreting the right of children to deviate upward is very difficult. One of the recurring problems of the teachers of the gifted may well be that of assisting classroom teachers to accept the gifted child and give him the freedom he needs to explore and develop his unique talents."[64]

community involvement

Community involvement is not just an idle, token "catchword" in enrichment experiences for gifted students. It is an essential element to supplement talents and other resources of faculty and students within the school.

Matching talented youngsters with relevant facilities, people and materials in the immediate area – and beyond – increases not only community involvement, but also community support. Beyond the school grounds are a rich variety of vital resources and talents which help motivate the gifted and make their education significantly more meaningful and exciting.

alternative approaches to strengthening school-community cooperation in gifted programs

Programs for gifted and talented students have used varying methods to involve the total community in developing and strengthening the programs. Many school districts utilize different forms of advisory committees to strengthen community involvement:

For example, in McComb, Mississippi:

> a school board advisory committee and the PTA executive council were involved in the initial planning. Throughout the project parents, community resource persons and community facilities have been utilized. The community has remained informed regarding programming and special events throughout the project.[65]

And, in Torrington, Wyoming:

> a parent advisory council was formed, meeting monthly at a luncheon meeting. There were two meetings held during the year for all parents of involved children. There was 100% attendance at the meetings for all parents.[66]

In Huron, South Dakota:

> an advisory council, composed of community representatives, faculty, and students, plays an important part in advertising the program to the public and in providing program leadership. The council meets as a group three or four times a

year, and is available individually or in small groups as needed. The council assists in securing advisors, in dissemination, and in surveying the community as to awareness of the program.[67]

Another popular approach to strengthening ties between school, parents, and community as they work cooperatively to improve a particular program for gifted and talented students is that of the "mentor" program component.

For example, in Oxford, Mississippi:

> a resource file has been developed with the names of people who have expressed an interest in visiting the class as resource persons. It has been found that even in a small community there has not been a lack of people with diversified occupations, hobbies, or interests who will readily share their knowledge for free.

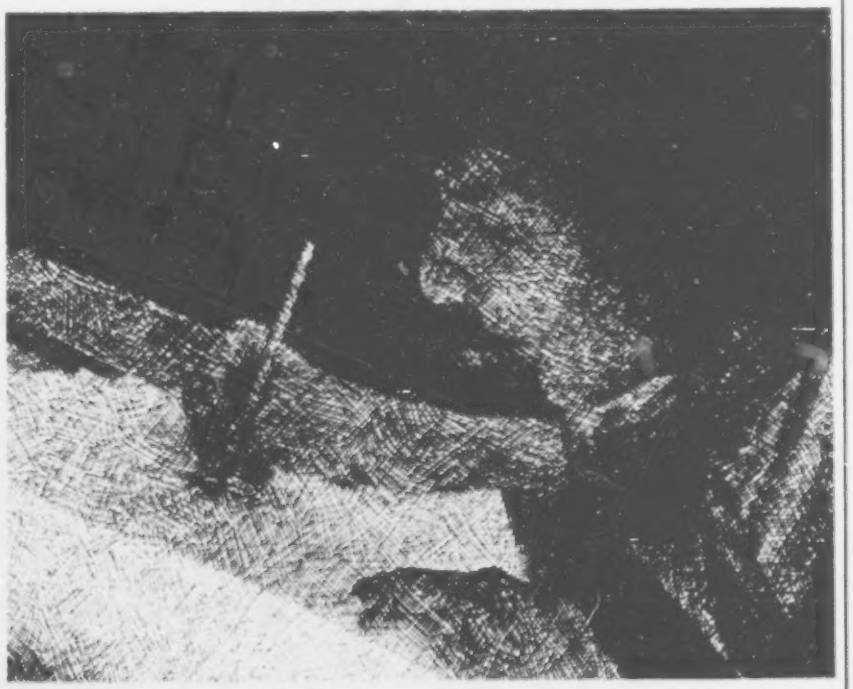
Resource persons help meet group and individual needs by sharing knowledge and personal experiences, demonstrating processes, lecturing, involving children in activities and providing orientation for field trips. These people often spark interest in independent study.

The most successful encounters with resource persons have occurred when meetings are informal. Children are given prior orientation and are allowed and encouraged to participate in discussions and to ask questions spontaneously.[68]

And in Huron, South Dakota:

> civic groups and other community members give of their talents and expertise in working with students. These people act as advisors to students in a particular field of interest. They include: senior citizens, retired teachers, business people, senior high school students, faculty members, or college instructors.[69]

A detailed description of Kershaw County's "Mentor Program" appears in Chapter III.



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3. *Educating for the Future: 21st Century Teaching.* North Carolina Department of Public Instruction, 1973.

4. *Florida's State Resource Manual for Gifted Child Education.* Florida Department of Education, 1973.

5. Gallagher, James J. *Teaching the Gifted Child.* Boston: Allyn and Bacon, 1975 (revised edition).

6. Goldberg, Miriam L. "How to Seek and How to Find Them – Identifying Gifted Pupils." December 1974. (speech to Interstate Work Conference with reprints available through the South Carolina Department of Education)

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8. *Guidelines for Gifted and Talented Programs.* Idaho State Board of Education, 1975.

9. Hoyt, Kenneth B. and Hebeler, Jean R., eds. *Career Education for Gifted and Talented Students.* Salt Lake City: Olympus Publishing Company, 1974.

10. Kaplan, Sandra N. *Providing Programs for the Gifted and Talented.* Ventura: National Leadership Training Institute on the Gifted and Talented, 1974.

11. Marland, Sidney. *Education of the Gifted and Talented.* Report to the Subcommittee on Education, Committee on Labor and Public Welfare, U.S. Senate, Washington, D. C., 1972.

12. Martinson, Ruth A. *The Identification of the Gifted and Talented.* Ventura: National Leadership Training Institute on the Gifted and Talented, 1974.

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14. *New Dimensions: Gifted/Talented.* North Carolina Department of Public Instruction, 1975.

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17. *New Opportunities for Gifted Children.* Kershaw County Schools, Camden, South Carolina, 1974.

18. *Parentspeak on Gifted and Talented Children.* Ventura: National Leadership Training Institute on the Gifted and Talented, 1976.

19. *Promising Practices: Teaching the Disadvantaged Gifted.* Ventura: National Leadership Training Institute on the Gifted and Talented, 1975.

20. Renzulli, Joseph S. *A Guidebook for Evaluating Programs for the Gifted and Talented.* Ventura: National Leadership Training Institute on the Gifted and Talented, 1975.

21. Runyon, Catmull, Hancock and Huckins. *Alternative Programming for the Gifted.* Florida Department of Education, 1976. (developed through a grant to the South Carolina Department of Education and issued through the Florida Department of Education)

22. *SEAGUL: A Sourcebook for Gifted Programs.* Kershaw County Schools, Camden, South Carolina.

23. *Talent Delayed-Talent Denied, The Culturally Different Gifted Child.* Reston: The Foundation for Exceptional Children, 1974.

24. *The Gifted Child Quarterly.* The National Association for Gifted Children. Los Angeles: Institute Press. (published quarterly)

25. Tongue, Cornelia and Sperling, Charmian. *Gifted and Talented: An Identification Model.* North Carolina Department of Public Instruction, 1976. (developed through a grant to the South Carolina Department of Education and issued through the North Carolina Department of Public Instruction)

FOOTNOTES

[1]Ruth A. Martinson, *The Identification of the Gifted and Talented* (National Leadership Training Institute on the Gifted and Talented, Ventura, 1974), pp. 12-13.

[2]Sidney Marland, *Education of the Gifted and Talented* (report to the Subcommittee on Education, Committee on Labor and Public Welfare, U.S. Senate, Washington, D. C., 1972), p. 3.

[3]Excerpt from speech given by Dr. James Gallagher at South Carolina Conference on the Gifted, March 1975.

[4]Miriam L. Goldberg, "How to Seek and How to Find Them—Identifying Gifted Pupils" (presentation given at Interstate Conference on the Gifted as part of Title V project, *Interstate Cooperative Effort for Gifted and Talented)*, pp. 1-2.

[5]*Ibid.*, pp. 2-3.

[6]*Education of the Gifted and Talented*, p. 2.

[7]*Ibid.*, pp. 21-23.

[8]*Guidelines for Gifted/Talented Programs* (Idaho State Board of Education, 1975), p. 2.

[9]This illustration represents research on talent discovery by Dr. Calvin W. Taylor, professor of psychology, University of Utah, Salt Lake City.

[10]*The Identification of the Gifted and Talented*, pp. 12-15.

[11]*Ibid.*

[12]*Ibid.*, p. 20.

[13]*Ibid.*, p. 4.

[14]*Ibid.*, pp. 25-26.

[15]*Ibid.*, pp. 4-5.

[16]"How to Seek and How to Find Them," p. 11.

[17]*Ibid.*, p. 2.

[18]*Ibid.*, p. 4.

[19]*Ibid.*, p. 6.

[20]*Ibid.*, p. 7.

[21]*Ibid.*, p. 12.

[22]*The Identification of the Gifted and Talented*, pp. 17-19.

[23]*Ibid.*, p. 46.

[24]*Ibid.*, pp. 46-48.

[25]*Ibid.*, pp. 48-49.

[26]*Ibid.*, pp. 53-55.

[27]*Ibid.*, p. 56.

[28]*Ibid.*, pp. 100-101.

[29]"How to Seek and How to Find Them," pp. 12-13.

[30]Cornelia Tongue and Charmian Sperling, *Gifted and Talented: An Identification Model* (developed through a Title V, Section 505 project administered through South Carolina and issued by the North Carolina Department of Public Instruction, 1976), pp. 13-20.

[31]*Ibid.*, p. 19.

[32]E. Paul Torrance, "Four Promising Practices for Teaching Gifted Disadvantaged Students," reprinted in *Promising Practices: Teaching the Disadvantaged Gifted* (National/State Leadership Training Institute on the Gifted and Talented, Ventura, 1975), p. 55.

[33]A. Harry Passow, "The Gifted and the Disadvantaged," reprinted in *Promising Practices: Teaching the Disadvantaged Gifted* (National/State Leadership Training Institute on the Gifted and Talented, Ventura, 1975), p. 55.

[34]*The Identification of the Gifted and Talented*, pp. 134-135.

[35]Source Unknown.

[36]Sandra N. Kaplan, *Providing Programs for the Gifted and Talented* (National Leadership Training Institute on the Gifted and Talented, Ventura, 1974), p. 7.

[37]*Ibid.*, p. 8.

[38]*Ibid.*, p. 27.

[39]*Florida's State Resource Manual for Gifted Child Education* (Florida Department of Education, 1973), p. 2.

[40]James J. Gallagher, *Teaching the Gifted Child*, revised (Boston: Allyn and Bacon, 1975), p. 72.

[41]*Providing Programs for the Gifted and Talented*, pp. 45-46.

[42]*Ibid.*

[43]*Ibid.*

[44]*Florida's State Resource Manual*, p. 12.

[45]*Ibid.*, pp. 13-15.

[46]J. Runyon, J. Hancock, J. Catmull and R. Huckins, *Alternative Programming for the Gifted* (developed through a Title V, Section 505 project administered through South Carolina and issued by the Florida Department of Education, 1976), pp. 11-12.

[47]*Ibid.*, pp. 21-22.

[48]*Ibid.*, pp. 23-25.

[49]*Ibid.*, pp. 41-44.

[50]*Ibid.*, pp. 41-44.

[51]*SEAGUL: A Sourcebook for Gifted Programs* (Kershaw County Schools, Camden, South Carolina, May 1975), p. 81.

[52]Information obtained from project application submitted to South Carolina Department of Education by Richland District 2, 1976-77.

[53]Information obtained from project application submitted to South Carolina Department of Education by Spartanburg District 7, 1976-77.

[54]*Teaching the Gifted Child*, p. 309.

[55] *Ibid.*, p. 312.

[56] *Florida's State Resource Manual*, pp. 18-19.

[57] *Education of the Gifted and Talented*, pp. 32-34.

[58] *Bulletin* (National Leadership Training Institute on the Gifted and Talented, Ventura, August 1976).

[59] *Florida's State Resource Manual*, p. 20.

[60] *Ibid.*, pp. 23-24.

[61] *Ibid.*, p. 25.

[62] Norman Hall, "Educational Leadership: Its Responsibilities to the Gifted and Talented Student," *New Directions for Gifted Education* (National Leadership Training Institute on the Gifted and Talented, Ventura, 1976), p. 34.

[63] *Florida's State Resource Manual*, pp. 25-26.

[64] *Ibid.*

[65] *Alternative Programming for the Gifted*, p. 1

[66] *Ibid.*, p. 22.

[67] *Ibid.*, p. 29.

[68] *Ibid.*, p. 3.

[69] *Ibid.*, p. 29.